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DATE MAILED: 05/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
Office Action Summary	10/726,491	MUKAIYAMA, YOSHIO	
	Examiner	Art Unit	
	Thu Nguyen	3661	
The MAILING DATE of this communication app	ears on the cover sheet with	the correspondence address	
Period for Reply			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICA 36(a). In no event, however, may a reply rill apply and will expire SIX (6) MONTH: cause the application to become ABAN	TION. be timely filed from the mailing date of this communication. DONED (35 U.S.C. § 133).	
Status			
1)⊠ Responsive to communication(s) filed on 01 Ma	arch 2006		
2a) ☐ This action is FINAL . 2b) ☐ This action is non-final.			
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is			
closed in accordance with the practice under E			
Disposition of Claims	•	,	
4)⊠ Claim(s) <u>1-20</u> is/are pending in the application.			
4a) Of the above claim(s) is/are withdrawn from consideration.			
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>1-20</u> is/are rejected.			
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and/or	election requirement.		
Application Papers			
9)☐ The specification is objected to by the Examiner	ſ.		
10) The drawing(s) filed on is/are: a) □ acce	epted or b) objected to by	the Examiner.	
Applicant may not request that any objection to the o	drawing(s) be held in abeyance.	. See 37 CFR 1.85(a).	
Replacement drawing sheet(s) including the correcti	on is required if the drawing(s)	is objected to. See 37 CFR 1.121(d).	
11)☐ The oath or declaration is objected to by the Exa	aminer. Note the attached O	ffice Action or form PTO-152.	
Priority under 35 U.S.C. § 119			
12)⊠ Acknowledgment is made of a claim for foreign a)⊠ All b)□ Some * c)□ None of:	priority under 35 U.S.C. § 1	19(a)-(d) or (f).	
1. Certified copies of the priority documents have been received.			
2. Certified copies of the priority documents have been received in Application No			
3. Copies of the certified copies of the priority documents have been received in this National Stage			
application from the International Bureau	` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` `		
* See the attached detailed Office action for a list of	of the certified copies not rec	ceived.	
Attachment(s)			
) Notice of References Cited (PTO-892)	4) Interview Sum	mary (PTO-413)	
 Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 1/10/06. 		ail Date πal Patent Application (PTO-152)	
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DETAILED ACTION

The amendment filed on March 1, 2006 has been entered. By this amendment, all claims 1-20 are now pending in the application.

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1, 11, 17, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Breed et al (US 2002/0198632) and further in view of Liu et al (US 6,985,089).

As per claim 1, 17, Breed teaches a vehicular communication apparatus installed in a vehicle for establishing bidirectional communication with a foreign moving object (para 0511-0512; 0621) in which a plurality of pieces of information are repeatedly transmitted and received in a constant cycle (lines 10-15 of para 0342; para 628), the apparatus comprises: a collection device that collects a plurality of pieces of information on the vehicle (para 0530-0531, 0546); a transmission device that transmits pieces of information to the foreign moving object (para 0316). Breed does not explicitly disclose a selection device that collects a plurality of pieces of information and that selects the pieces of information to be transmitted in accordance with an emergency level that is determined in accordance with the situation between the host vehicle and the moving object. However, Liu teaches a selection device that collects a plurality of pieces of

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information and that selects the pieces of information to be transmitted in accordance with an emergency level (col.2, lines 32-40; col.4, lines 51-65), furthermore, since Liu teaches determining the emergency level based on immediate braking situation, etc. which may present hazard to the surrounding vehicles (col.6, lines 48-51; col.8, lines 41-43), liu obviously encompasses determining emergency level based on the situation between the vehicle, since when the host vehicle apply sudden brake, the situation between the host vehicle and the following vehicle is obviously changed. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to implement the selection device taught by Liu to the apparatus taught by Breed in order to save transmission bandwidth by transmitting only appropriately related messages to other vehicles.

As per claim 11, 19, Breed teaches a vehicular communication apparatus for bidirectional communication in which a plurality of pieces of information are repeatedly transmitted and received in a constant cycle (lines 10-15 of para 0342; para 628). The apparatus comprises: a transmission device for transmitting information including an identification code for the foreign moving object to identify the vehicle, a reception device, a collection device (para 0530-0531, 0546), and the detection device (para 0344-0345). Breed does not explicitly teach a selection device for selecting information in accordance with an emergency level. However, Liu teaches selecting information according to the emergency level (refer to claim 1 above). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the selection device of Yu to the system of Breed, and to select the information according to the emergency level as taught by Liu in order to save the transmission bandwidth.

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3. Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Breed et al (US 2002/0198632) and further in view of Liu et al (US 6,985,089) and further in view of Yu et al (US 2003/0125846)

As per claim 2-5, Yu teaches selecting information according to a type of the foreign moving object (para 0051, 0043) or the relationship between the vehicle and the foreign moving object and a circumstance in which the foreign object run (para 0044). Moreover, Yu teaches selecting information according to user preference of the foreign moving object (para 0040), further, generating request for information would have been well known.

4. Claims 6-10, 12-16, 18, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Breed et al (US 2002/0198632) in view of Liu et al (US 6,985,089) and further in view of Yu et al (US 2003/0125846) and Taylor (US 2003/0169185).

As per claim 6-10, Breed teaches the capability of transmitting emergency messages at priority level (para 0349; 0300-0302). Moreover, Taylor teaches determining an emergency level with the foreign object on the basis of relationship between the vehicle and the foreign object, determining foreign object to be communicated with, and providing information concerning emergency level (para 0054; 0076; 0095-0135); moreover, changing frequency in accordance with the emergency level for adjusting the frequency of message sending would have been well known. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the capability of categorizing information into different emergency level in order to facilitate providing warning to the user accordingly.

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As per claim 12-16, refer to claims 1, 7-8 above. Moreover, Breed teaches the moving

object reception device and the capability of providing emergency information and collision

avoidance (para 0300-0302), furthermore, Taylor teaches including the capability of recognizing

emergency level from a received information (para 0095-0135), moreover, processing data

according to the emergency level would have been well known.

As per claim 18, 20, refer to claim 6, 12 above.

Response to Arguments

5. Applicant's arguments have been considered but are moot in view of the new ground(s)

of rejection.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Thu Nguyen whose telephone number is (571) 272-6967. The

examiner can normally be reached on T-F (7:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Thomas Black can be reached on (571) 272-6956. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

May 15, 2006

THU V. NGUYEN
PRIMARY EXAMINER

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